

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S33 6	56	S335 not S334	US-PGPUB; USPAT	OR	ON	2005/08/26 14:51
S33 5	73	( (heat\$1spreader or (heat adj spreader)) with (bottom near2 (carrier or pcb or substrate)) ) and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 14:51
S33 4	31	( (heat\$1spreader or (heat adj spreader)) with ((center or middle) near2 (carrier or pcb or substrate)) ) and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 14:51
S19 4	45	S192 not S190	US-PGPUB; USPAT	OR	ON	2005/08/26 14:51
S35 8	58	S357 and (@ad<"20040703" or @rlad<"20040703") and (( bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip )) and (stiffen or stiffener or stiffening)	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 7	1169	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((bottom or backside or back\$1side) with (support or pcb or printed or ceramic or board) ) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 6	20	S355 and (@ad<"20040703" or @rlad<"20040703") and (( bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 5	97	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((bottom or backside or back\$1side) adj (support or pcb or printed or ceramic or board) ) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 4	43	S353 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 3	49	"5909056"	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00

S35 2	39	S351 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 1	67	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) near3 (bottom or backside or back\$1side)) with (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 0	27	S349 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 9	47	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) near2 (bottom or backside or back\$1side)) with (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 8	14	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) near (bottom or backside or back\$1side)) with (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 7	15	S346 not S338	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 6	16	S345 not S343	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 5	24	S344 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 4	133	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) near2 (bottom or backside or back\$1side)) not (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 3	39	S342 not S340	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00

S34 2	55	S341 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 1	482	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) with (bottom or backside or back\$1side)) not (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S34 0	16	S339 and (@ad<"20040703" or @rlad<"20040703") and ((ball or bump or bga or (ball\$1grid) or (ball adj grid) or (flip adj chip) or flip\$1chip ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S33 9	64	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with ((support or pcb or printed or ceramic or board) near (bottom or backside or back\$1side)) not (chip or die ))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S33 8	11	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (support or pcb or printed or ceramic or board) ) and S337	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S33 7	22	"5991156" "5693572"	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S25 1	36	S250 not (S245 or S240 or S236 or S233 or S229 or S227 or S220)	US-PGPUB; USPAT	OR	ON	2005/08/26 15:00
S35 9	42	S358 not (S356 or S354 or S352 or S350 or S348 or S347 or S340)	US-PGPUB; USPAT	OR	ON	2005/08/26 15:01
S36 1	1	"20050174744" and bolster	US-PGPUB; USPAT	OR	ON	2005/08/26 15:03
S37 0	0	S369 not (S359 or S336)	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 9	3	S368 and ( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (substrate near2 (bottom or backside or back\$1side) ) same ((heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) near3 substrate) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 8	24	S367 not S364	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12

S36 6	28	S365 and (stiff or stiffener or stiffening or stiffened or stiffen) ((heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (substrate near2 (bottom or backside or back\$1side)))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 5	336	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (substrate near2 (bottom or backside or back\$1side))) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 4	4	S363 and (stiff or stiffener or stiffening or stiffened or stiffen)	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 3	142	S362 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 2	142	((heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (substrate near (bottom or backside or back\$1side))) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S36 0	39	S359 not S336	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S29 5	2	S294 and (( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (substrate near2 (bottom or backside or back\$1side)) ) same ((heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) near3 substrate)) )	US-PGPUB; USPAT	OR	ON	2005/08/26 15:12
S37 1	1	((heat\$1sink or (heat adj sink)) with (cte or coefficient) with ("same" near (carrier or substrate)))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:16
S76	1	S41 and ((heat\$1sink or (heat adj sink)) with (cte or coefficient) with ("same" near (carrier or substrate)))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:16
S37 2	10	((heat\$1sink or (heat adj sink)) with (cte or coefficient) with ((match or matching or matched or equal) near (carrier or substrate)))	US-PGPUB; USPAT	OR	ON	2005/08/26 15:17
S36 7	28	S366 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/08/26 15:17
S37 3	10	S372 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/08/26 15:23
S40	1	((heat\$1sink or (heat adj sink)) with (cte or coefficient) with ("same" near (carrier or substrate)))	US-PGPUB; USPAT	OR	ON	2005/09/03 19:11

S37 5	1	( (heat\$1sink or (heat adj sink)) with (cte or coefficient) with ("same" near (carrier or substrate)) )	US-PGPUB; USPAT	OR	ON	2005/09/03 19:12
S37 6	0	( (heat\$1sink or (heat adj sink)) with (cte or coefficient) with (match or matching or matched) with meaning )	US-PGPUB; USPAT	OR	ON	2005/09/03 19:13
S6	126	S5 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2005/09/03 19:13
S37 8	52	S377 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2005/09/03 19:14
S37 7	167	( (heat\$1sink or (heat adj sink)) with (cte or coefficient) with (match or matching or matched) )	US-PGPUB; USPAT	OR	ON	2005/09/03 19:14
S38 2	162	S381 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2005/09/03 19:15
S38 0	6	S379 and (("257"/\$3.cor.) or ("438"/\$3.cor.))	US-PGPUB; USPAT	OR	ON	2005/09/03 19:15
S37 9	37	( (heat\$1sink or (heat adj sink)) with (support) with (match or matching or matched) )	US-PGPUB; USPAT	OR	ON	2005/09/03 19:15
S37 4	41	"4788627" and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/03 19:16
S38 1	906	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (match or matching or matched) )	US-PGPUB; USPAT	OR	ON	2005/09/05 11:57
S38 5	126	S384 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/05 11:58
S38 3	159	S382 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/05 11:58
S38 6	40	S385 and (@ad<"20040703" or @rlad<"20040703") and (ball or bga)	US-PGPUB; USPAT	OR	ON	2005/09/05 11:59
S38 8	0	"20020171144".did. and ((match or matching or matched) with substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:04
S38 4	128	( (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (match or matching or matched) with substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:04
S39 0	1	"20020171144".did. and (cte or coefficient)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:05
S38 9	0	"20020171144".did. and ((match or matching or matched) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:06

S39 5	1	"20020171144".did. and (substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:07
S39 4	1	(( tape with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:07
S39 2	0	((cte or coefficient) with tape with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) with (match or matching or matched) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:07
S39 1	1	"20020171144":did. and (material with substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:07
S39 6	31	((cte or coefficient) with (ceramic or plastic) with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:08
S38 7	22	S385 and (@ad<"20040703" or @rlad<"20040703") and (ball\$1grid or (ball adj grid) or bga)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:08
S39 3	0	((cte or coefficient) with tape with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:10
S40 1	4	((cte or coefficient) with equal with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:11
S40 0	0	((cte or coefficient) with equal with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	EPO; JPO; DERWENT	OR	ON	2005/09/05 12:11
S39 9	0	((cte or coefficient) with substrate with equal with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	EPO; JPO; DERWENT	OR	ON	2005/09/05 12:11

S39 8	1	((cte or coefficient) with substrate with equal with (match or matching or matched) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:42
S39 7	2	S396 and (@ad<"20040703" or @rlad<"20040703") and (ball\$1grid or (ball adj grid) or bga)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:43
S40 7	13	S406 and (ball\$1grid or (ball adj grid) or bga)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:47
S40 5	18	S404 not S403	US-PGPUB; USPAT	OR	ON	2005/09/05 12:47
S40 3	3	S402 and (@ad<"20040703" or @rlad<"20040703") and (ball\$1grid or (ball adj grid) or bga)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:47
S40 8	0	(polysilicon adj support adj substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:48
S40 6	1084	(polysilicon adj substrate)	US-PGPUB; USPAT	OR	ON	2005/09/05 12:48
S40 2	21	("same" adj material) with substrate with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:52
S41 2	7	S409 not S411	US-PGPUB; USPAT	OR	ON	2005/09/05 12:53
S41 1	21	("same" adj material) with substrate with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:53
S41 0	28	S409 not "s4023"	US-PGPUB; USPAT	OR	ON	2005/09/05 12:53
S40 9	28	("same" adj (material or metal or alloy or composite)) with (substrate or carrier or support) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:55

S41 3	28	(("same" adj (material or metal or alloy or composite or epoxy or dielectric or insulation or insulating or ceramic or insulator)) with (carrier or substrate or carrier or support) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 12:57
S41 5	49	S414 not S409 or S411	US-PGPUB; USPAT	OR	ON	2005/09/05 12:58
S40 4	21	S402 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/05 12:58
S42 0	12	S419 not (S414 or S409 or S411)	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02
S41 9	40	S418 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02
S41 8	40	(("both" near (composed or made or constructed or constructing or form or forming or formed or construct or used or use or using)) with (carrier or substrate or carrier or support) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02
S41 7	28	S416 and (@ad<"20040703" or @rlad<"20040703")	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02
S41 6	28	S414 not (S409 or S411)	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02
S41 4	28	(("both" near (composed or made or constructed or constructing or form or forming or formed or construct)) with (carrier or substrate or carrier or support) with (heat\$1spreader or (heat adj (sink or spreader or slug)) or heat\$1sink or heat\$1slug) )	US-PGPUB; USPAT	OR	ON	2005/09/05 13:02